

08/16

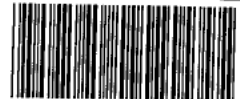


NUS
CORPORATION



A Halliburton Company

8811-22-04



SEMS DocID

2334451



FIELD INVESTIGATION TEAM ACTIVITIES AT UNCONTROLLED HAZARDOUS SUBSTANCES FACILITIES — ZONE I

NUS CORPORATION
SUPERFUND DIVISION

ORIGINAL
(Red)

R-585-1-9-54
NON-SAMPLING SITE RECONNAISSANCE SUMMARY REPORT
GULF OIL DARBY CREEK TANK FARM SITE
PREPARED UNDER

TDD NO. F3-8811-22
EPA NO. PA-788
CONTRACT NO. 68-01-7346

FOR THE
HAZARDOUS SITE CONTROL DIVISION
U.S. ENVIRONMENTAL PROTECTION AGENCY

FEBRUARY 8, 1989

NUS CORPORATION
SUPERFUND DIVISION

SUBMITTED BY

REVIEWED BY

APPROVED BY

Not responsive due to revised scope

GEOLOGIST

AGRICULTURAL ENGINEER

ASSISTANT MANAGER

ORIGINAL
(Red)

Scope of Work

NUS FIT 3 was tasked to conduct a non-sampling site reconnaissance of the Gulf Oil Darby Creek Tank Farm site, located in Darby Township, Delaware County, Pennsylvania.

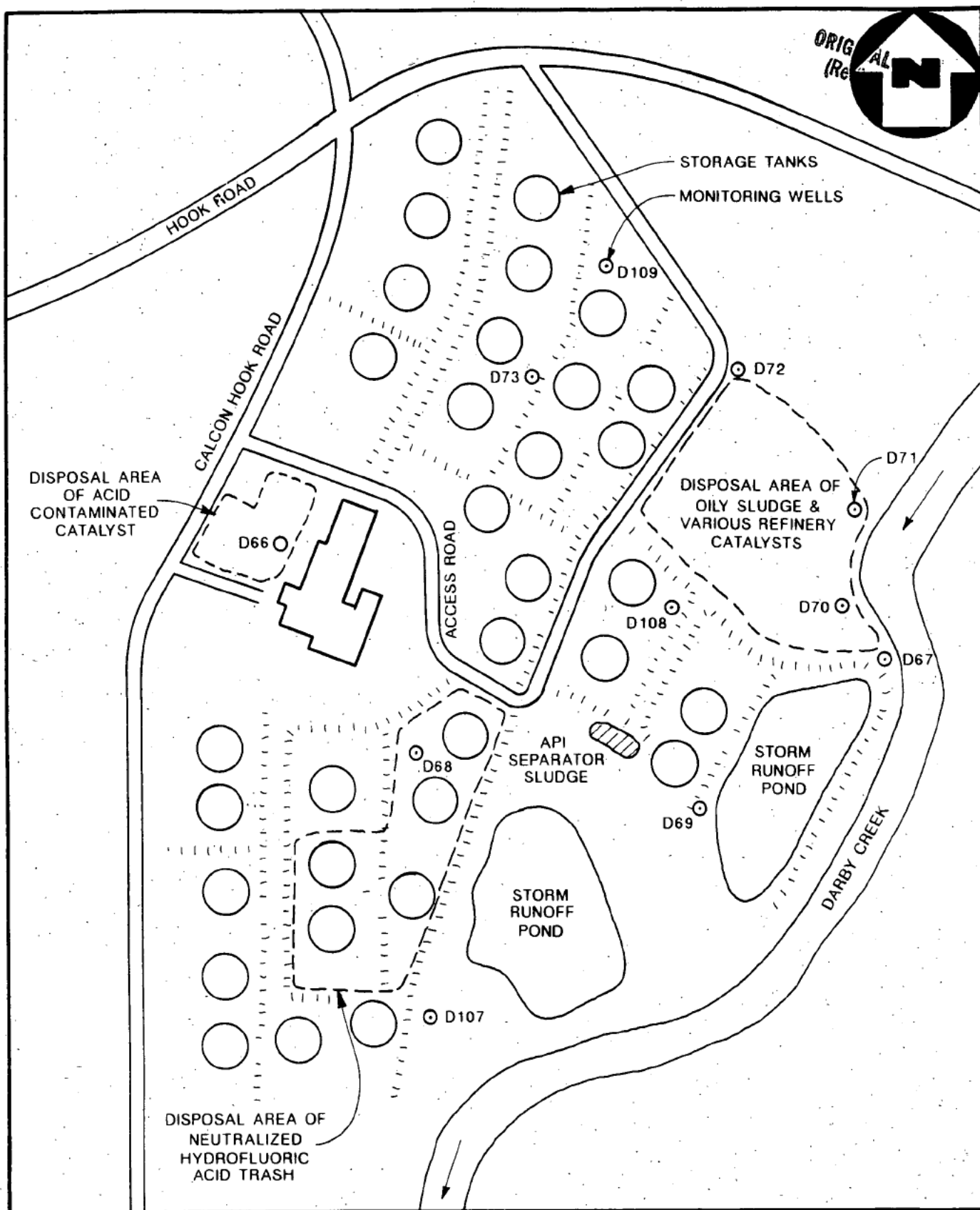
Background Information

The Gulf Oil Darby Creek Tank Farm is located on Calcon Hook and Hook Roads, northwest of and adjacent to Darby Creek (see figure 1, page 2). Some areas of the site are located on the flood plain of Darby Creek. The site is 97.31 acres in size and contains 33 storage tanks. It lies approximately 1/4 mile north of the Tinicum National Environmental Center. The site was formerly a gravel quarry that was filled for the construction of a crude-oil-storage tank farm by Chevron Corporation. Three distinct areas of the fill material contain process waste generated by the Chevron Refinery. Waste materials were deposited on site from 1949 to 1979 (see figure 2, page 3).

Acid-contaminated catalysts were disposed in an area near the entrance gate to the access road. These catalysts are associated with such metals as nickel, molybdenum, aluminum, lead, chromium, vanadium, platinum, and palladium. Although no sampling has been conducted at the site, the site representatives believe the soils in this area are acidic.

Another area of past waste disposal is located in the southwestern portion of the site. In this area, hydrofluoric-acid-contaminated trash was disposed. The trash is a by-product of a processing unit at the refinery that used hydrofluoric acid. The trash consisted of materials such as gaskets, etc. It is believed by company officials that the materials were neutralized with sodium bicarbonate before disposal.

The third area is located on the eastern boundary of the site and was used for the disposal of oily dirt from the refinery (possibly containing lead and chromium) and various refinery catalysts. Metal wastes such as refrigerators are also known to have been disposed here. An estimated 140 cubic yards of soil material were removed and replaced with fresh soil. Six inches of oil were noted by Chevron representatives to be floating on top of the groundwater in a monitoring well (D-71) in this area.

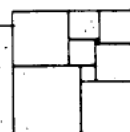


SITE SKETCH

FIGURE 2

GULF OIL DARBY CREEK TANK FARM, DARBY, PA

(NO SCALE)



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During the earlier years of waste disposal at the site, trash and demolition debris may have also been disposed at the site. Since records were not maintained and the site was not strictly regulated, other unknown materials may have been disposed at the site.

The facility has a hazardous waste generator number (PAD980555254), although, at present, no hazardous waste is generated. An API separator is located on site for recovering oil from oily water. The oil recovered from this process is stored in a tank, and the wastewater is discharged to DELCORA, in Chester, Pennsylvania. The sludge is transported to the Chevron/Gulf Philadelphia Refinery to be incinerated (Permit No. 300518).

The Gulf Oil Darby Creek Tank Farm also has an NPDES permit (PA0011541), for the discharge of two storm runoff ponds into Darby Creek, and four air quality permits (23-302-073, 23-312-117, 23-312-118, and 23-312-086).

Sampling to Date

No groundwater sampling has been conducted at the Gulf Oil Darby Creek Tank Farm site to date. On March 5, 1986, Dames and Moore sampled the acid-contaminated catalyst area to a depth of five feet for lead. The two soil sample results showed the area to contain levels of 52 and 83 ppm. The hydrofluoric-acid-contaminated trash area was also sampled for lead. The two soil samples revealed levels of 14 and 37 ppm. These samples were also taken to a depth of five feet (see attachment 2).

Drinking Water Supply

Residents within the study area are supplied water by the Philadelphia Water Company and the Philadelphia Suburban Water Company. Those residents living east and southeast of the site are supplied water by the Philadelphia Water Company, which serves approximately 273,973 residents. The remainder of the residents in the study area, approximately 128,052 persons, rely on the Philadelphia Suburban Water Company for their drinking water supplies. No intakes or wells used by the two water companies are situated within the study area.

ORIGINAL
(Red)

Geology Information

The Gulf Oil Darby Creek Tank Farm site lies within the Atlantic Coastal Plain Province of southeastern Pennsylvania.¹ The geologic framework of the Coastal Plain Province consists of underlying, gently southeastward-dipping, unconsolidated marine and fluvial deposits of clay, silt, sand, and gravel of late Cretaceous and Tertiary age. Areas are also covered by interglacial fluvial deposits of Quaternary (Pleistocene) age. The land surface has a very gentle slope and a dendritic drainage pattern.²

The site is immediately underlain by the Quaternary age Trenton Gravel.³ The Trenton Gravel is a gray to pale reddish-brown, medium- to coarse-grained, very gravelly sand. There are also interbedded clay, silt, and crossbedded sand layers.^{1,2,4} The formation is mostly continuous and occurs chiefly in the lowland along the Delaware River from Trenton to the Atlantic Ocean.² It is believed to be the equivalent of the Cape May Formation of New Jersey.⁴ The youngest of the interglacial (the time between glaciations) formations, the Trenton Gravel has been correlated with the Sangamon interglacial stage (approximately 300,000 years ago). The Trenton Gravel was part of an estuarine deltaic-marine depositional environment driven and supplied by meltwater and sediment derived from retreating glaciers. Its thickness in the study area is approximately 20 to 40 feet.^{1,4}

The site is underlain by Made land soils. This soil type consists of areas where the profile of the normal soil has been destroyed by industrial development. The soil materials consist of sand, gravel, and clay in various mixtures, but gravelly materials predominate. Soil characteristics are so variable that permeability and pH were not determined.⁵

Groundwater Information

The Trenton Gravel has a high permeability and high porosity.⁴ In adjacent Philadelphia County, well depths in the Trenton Gravel range from 17 to 181 feet, and casing depths range from 10 to 80 feet. Well yields range from 10 to 725 gallons per minute (gpm), with a median yield of 80 gpm. Although public water supply is not currently drawn from the Trenton Gravel, the formation may be hydraulically interconnected with the Cretaceous age Potomac-Raritan-Magothy Formation (used as aquifers by water companies in New Jersey).¹

The direction of shallow groundwater flow is expected to be to the south and southeast, toward Darby Creek. Flow directions are based upon the documented role of streams and wetlands as discharge points for groundwater.

Summary of Activities

On December 7, 1988, NUS FIT 3 members **Nonresponsive based on revised scope** conducted a non-sampling site reconnaissance of the Gulf Oil Darby Creek Tank Farm site. FIT 3 was accompanied by Frank Hannigan, environmental specialist for Chevron, and Robert Vogelsong, environmental engineering technician for Chevron. Weather conditions during the site visit were sunny, with a temperature of 53°F. Photographs were taken on site (see attachment 1).

Persons Contacted

Prior to Field Trip

Paul Racette
Site Investigation Officer
U.S. EPA
841 Chestnut Building
Ninth and Chestnut Streets
Philadelphia, PA 19107
(215) 597-1073

Timothy Sheehan
Project Officer
Pennsylvania Department of
Environmental Resources
Sycamore Mills Road
Media, PA 19063
(215) 565-1687

Frank Hannigan
Environmental Specialist
Chevron U.S.A., Incorporated
P.O. Box 7408
Philadelphia, PA 19101
(215) 339-7466

At the Site

Frank Hannigan
Environmental Specialist
Chevron U.S.A., Incorporated
P.O. Box 7408
Philadelphia, PA 19101
(215) 339-7466

Robert Vogelsong
Environ. Engineering Technician
Chevron U.S.A., Incorporated
P.O. Box 7408
Philadelphia, PA 19101
(215) 339-7125

Water Supply Well Information

No home well surveys were distributed. All residents within the study area are supplied water by the Philadelphia Water Company and the Philadelphia Suburban Water Company from sources beyond the study area.

Site Observations

- The HNU background reading was 0.2 ppm. A reading of 4 to 12 ppm was obtained at monitoring well (MW) D-71, located in the eastern section of the site. Chevron officials reported that approximately six inches of oil floats on the water in this well.
- The radiation mini-alert was set at the X1 position; no readings above background were recorded.
- Thirty-three crude oil storage tanks were observed on site.
- The dikes around the storage tanks were approximately 10 feet high.
- Eleven monitoring wells were observed on site.
- Two storm runoff ponds were observed in the southeastern portion of the site.
- A pool of API separator sludge was observed in the mid-southeastern section of the site.
- Ponded water was observed at various sections of the site.
- Darby Creek is located approximately 50 feet from the southeastern boundary of the site; it flows southwestwardly.

Geology and Groundwater References

1. Pennsylvania Geologic Survey, In Cooperation with the United States Geological Survey. Groundwater Resources of the Coastal Plain Area. Bulletin W13, 1961.
2. Wolfe, Peter E. Landscapes of the Coastal Plain. In The Geology and Landscapes of New Jersey. New York: Crane Russak and Company, Incorporated. 1977.
3. Pennsylvania Department of Environmental Resources, Bureau of Topographic and Geologic Survey. Atlas of Preliminary Quadrangle Maps of Pennsylvania. Frankford Quadrangle, 7.5 Minute Series, 1978.
4. Pennsylvania Department of Environmental Resources, Bureau of Topographic and Geologic Survey. Engineering Characteristics of the Rocks of Pennsylvania. Environmental Geology Report 1, 1982.
5. United States Department of Agriculture, Soil Conservation Service. Soil Survey of Bucks and Philadelphia Counties, Pennsylvania. July 1975.

ATTACHMENT 1

Original
(Red)

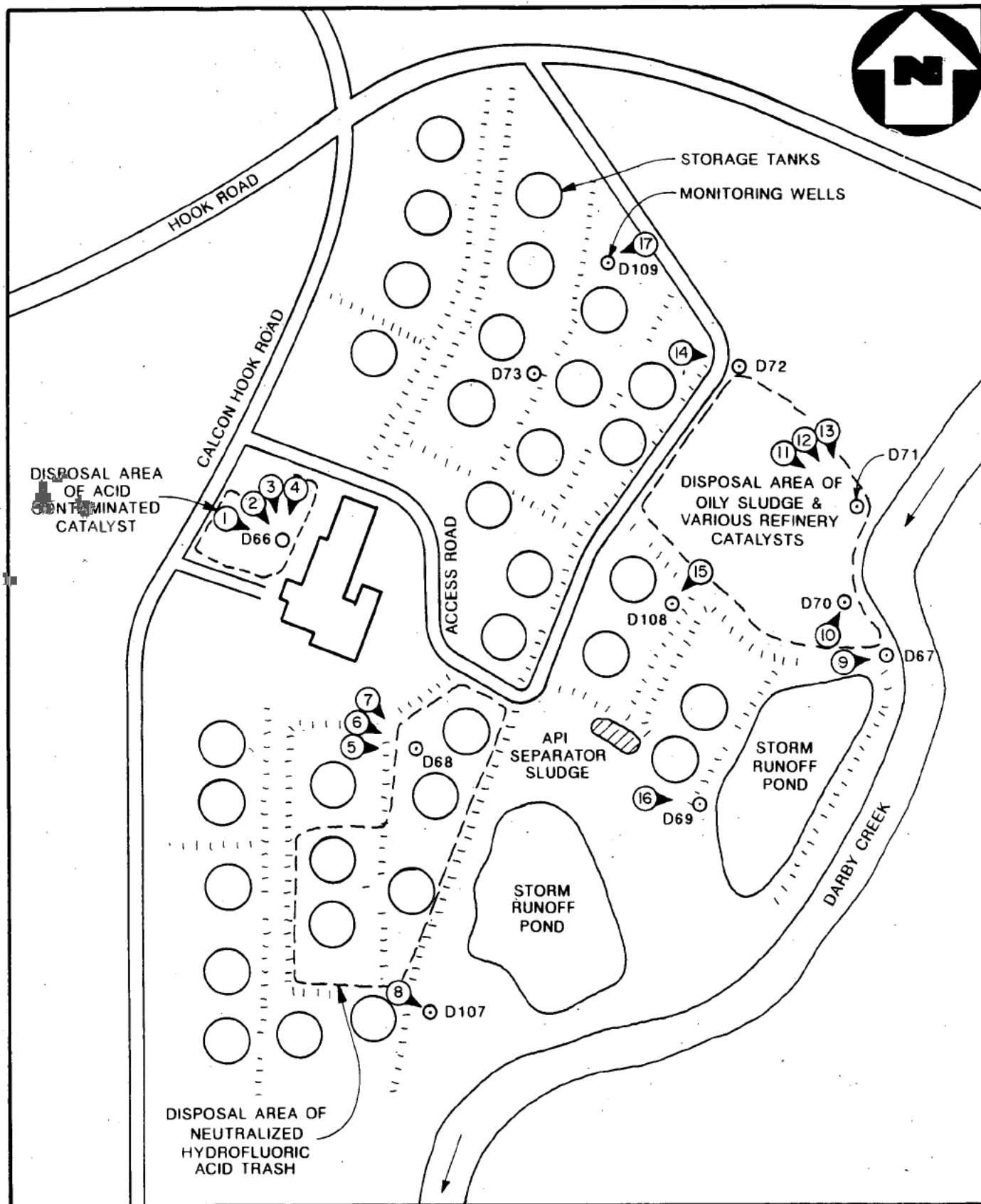
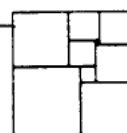


PHOTO LOCATION MAP

FIGURE 3

GULF OIL DARBY CREEK TANK FARM, DARBY, PA

(NO SCALE)



NUS
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Photo 1-
MW D-66 View East

ORIGINAL
(Red)

Darby Creek Tank Tadm

F3-8811-22

PA-788

R.P.
photo 1

MW D-66

View East

Not responsive due to revised scope

12/7/88

Time 10:15

ORIGINAL
(Red)

Photo 1
MW D-66 View East



Photos 2,3,& 4-
Panoramic view of acid contaminated disposal
area. View Southeast

ORIGINAL
(Red)

Darby Creek Tank Farm

R₁ P₂
photo 2

R₁ P₃ 22
photo 3

R₁ P₄
photo 4

Darby Creek Tank Farm
FJ-8811-22
PA-788

Panoramic View of acid contaminated
catalyst disposal area View SE

acid contaminated
area View SE

Panoramic View of acid contaminated
catalyst disposal area View S.E.

Not responsive due to revised scope

Time 10:20

Time 10:20

Time 10:20

Photos 2, 3, & 4
Panoramic view of acid contaminated disposal
area. View Southeast
ORIGINAL
(back)

12/7/88

Not responsive due to revised scope



Photo 5-
MW D-68 View East

ORIGINAL
(Red)



Photos 6 & 7-
Panoramic view of neutralized hydrofluoric
acid trash disposal area. View East

ORIGINAL
(Red)

Darby Creek Tank Farm

FS-8811-22

PA-788

R, P₅

photo 5

MW D-68

View east

Not responsive due to revised scope

12/7/88

Time 1025

ORIGINAL
(Red)

Photo 5 -
MW D-68 View East

Darby Creek Tank Farm

FS-8811-22

PA-788

R, P₇

photo 7

Tank Farm

R, P₆

photo 6

Panoramic View of neutralized hydrofluoric
acid trash disposal area.

Not responsive due to revised scope

View east

Panoramic View of hydrofluoric acid
trash disposal area. View east

Not responsive due to revised scope

12/7/88

Time 1027

12/7/88

Time 1027

ORIGINAL
(Red)
Panoramic view of neutralized hydrofluoric
acid trash disposal area. View East

Photos 6 & 7 -



Photo 8-
MW D-107 View East

ORIGINAL
(Red)



Photo 9-
MW D-67 View East

ORIGINAL
(Red)

Darby Creek Tank Farm

F3-8811-22

PA-788

R.P.₈

photo₈

MW D-107

Not responsive due to revised scope

12/7/88

Time 10:35

ORIGINAL
(Red)

Photo B-
MW D-107 View East

Darby Creek Tank Farm

F3-8811-22

PA-788

R.P.₉

photo₉

MW D-67

View east

Not responsive due to revised scope

12/7/88

Time 10:40

ORIGINAL
(Red)

Photo B-
MW D-67 View East



Photo 10-
MW D-70 View North ORIGINAL
(Red)

Darby Creek Tank Farm

F3-8811-22

PA-788

R.P.10

photo10

MW D-70

View north

Not responsive due to revised scope

12/7/88

Time 10:44

Photo 10-
MW D-70 View North
(Red)
ORIGINAL



Photos 11, 12, & 13-
Panoramic view of oily sludge and various

Daily Creek Tank Farm

FS 8811-22

PA-788

R.P.13
photo 13

Panasonic View of oily sludge and
various refinery catalyst disposal area
near MW D-71
View SE

12/7/88

Time 10:47

R.P.12
photo 12

Daily Creek Tank Farm

R.P.11
photo 11

Panasonic View of oily sludge and
various refinery catalyst disposal area
near MW D-71
View SE

Time 10:47

Time 10:47

Photos 11, 12, 13
Panasonic view of oily sludge and various



Photo 14-
MW D-72 View East
ORIGINAL
(Red)



Photo 15-
MW D-108 View Southwest
ORIGINAL
(Red)

Darby Creek Tank Farm

F3-8811-22

PA-788

R. P. 14

photo 14

MW D-72

View east

Not responsive due to revised scope

12/7/88

Time 10:55

ORIGINAL
(Red)

Photo 14-
MW D-72

Darby Creek Tank Farm

F3-8811-22

PA-788

R. P. 15

photo 15

MW D-108

View SW

Not responsive due to revised scope

12/7/88

Time 11:00

ORIGINAL
(Red)

Photo 15-
MW D-108



Photo 16- ORIGINAL
MW D-69 View East (Red)



Photo 17- ORIGINAL
MW D-109 View Southwest (Red)

Darby Creek Tank Farm

F3-8811-22

PA-788

R, P₁₆

photo 16

MW D-64

View East

Not responsive due to revised scope

12/1/88

Time 11:05

ORIGINAL
(Red)

Photo 16-
MW D-64 View East

Darby Creek Tank Farm

F3-8811-22

PA-788

R, P₁₇

photo 17

MW D-109

View SW

Not responsive due to revised scope

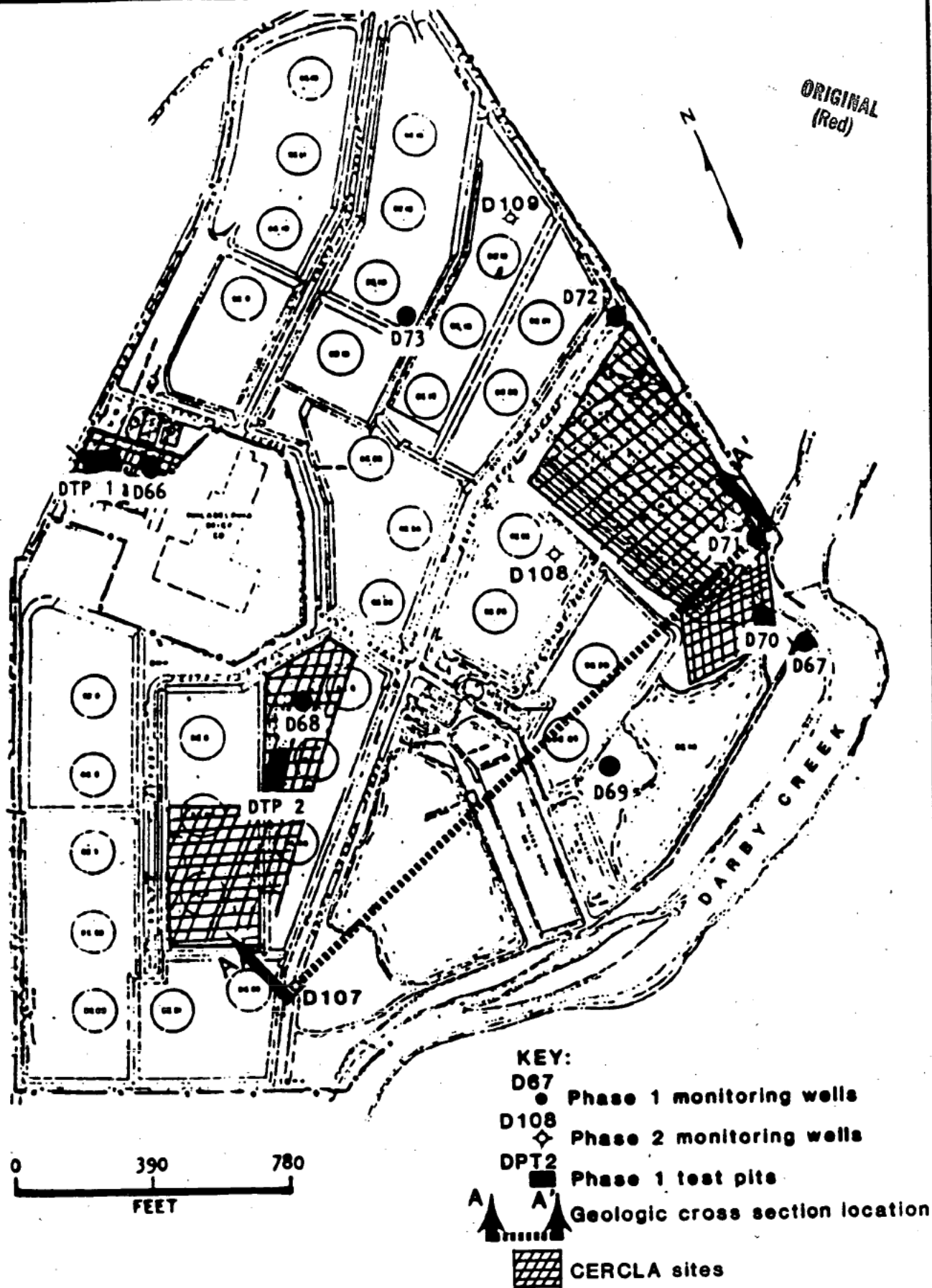
12/1/88

Time 11:10

ORIGINAL
(Red)

Photo 17-
MW D-109 View SW

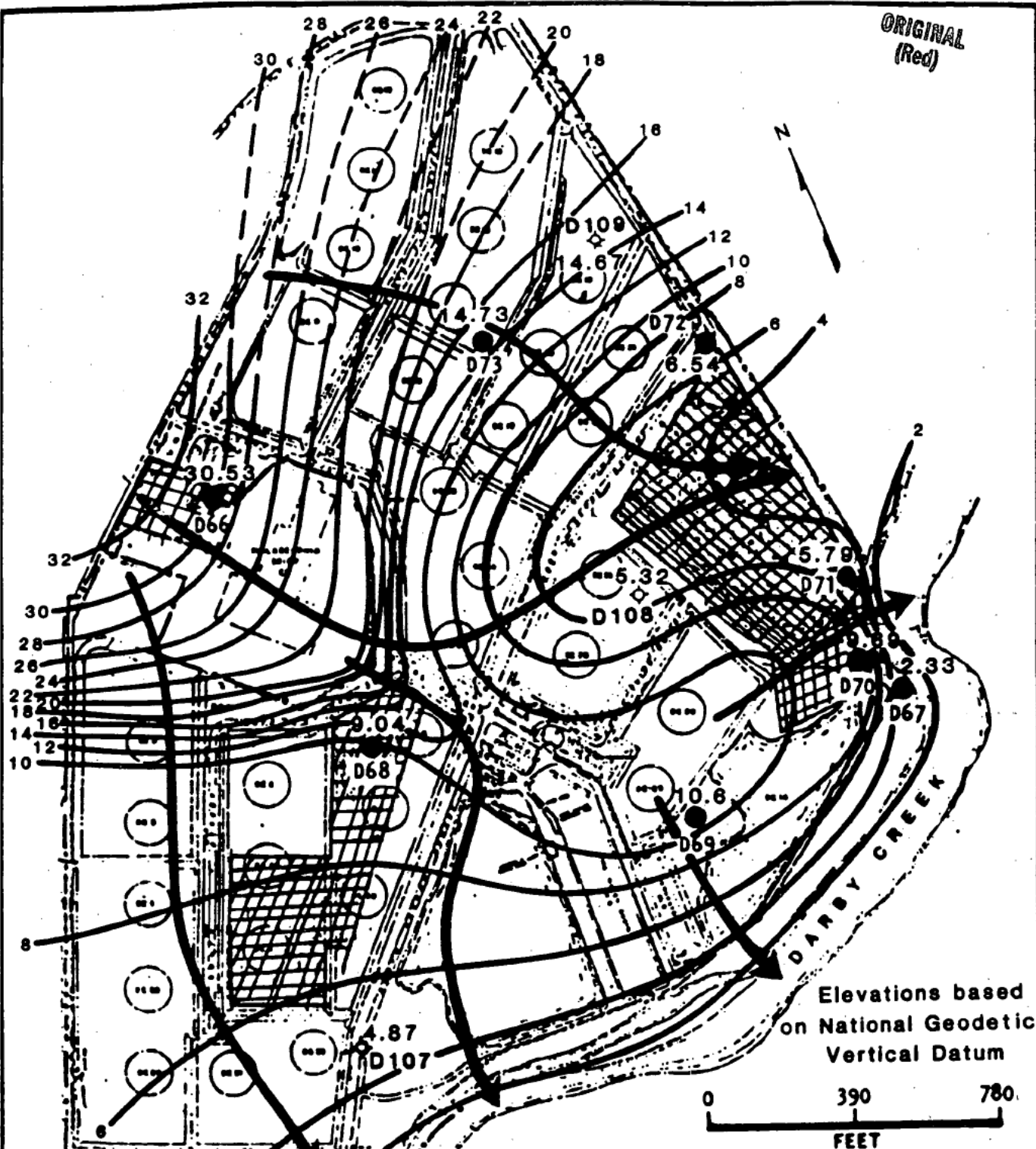
ATTACHMENT 2



PLOT PLAN **CHEVRON/GULF PHILADELPHIA REFINERY** **DARBY CREEK TANK FARM**

Dames & Moore

ORIGINAL
(Red)

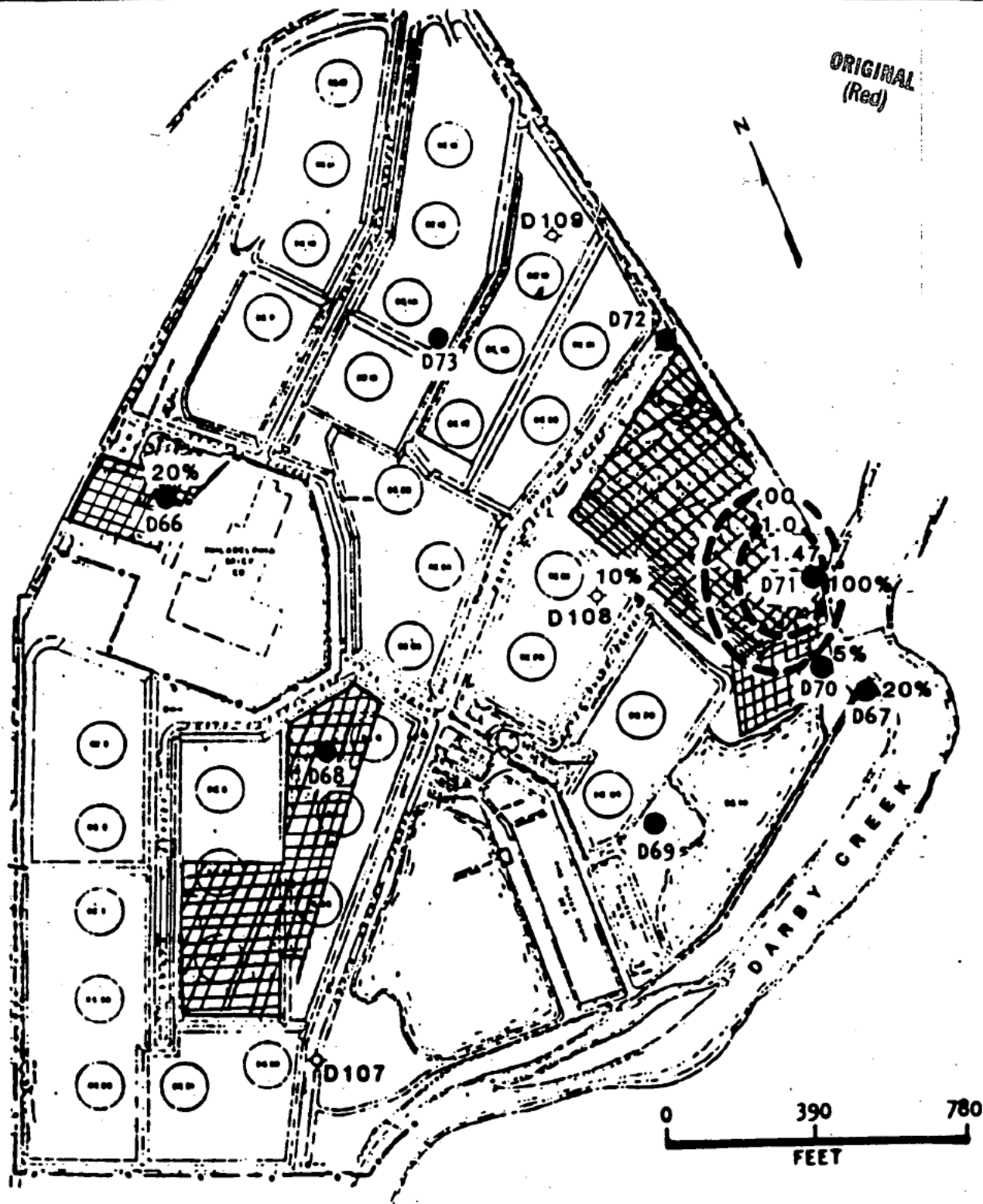


KEY:
 D67 2.33 ● Phase 1 monitoring wells showing ground water elevations (1-9-87)
 D108 5.32 ◇ Phase 2 monitoring wells showing ground water elevations (1-13-87)
 18 --- Ground water table contour, dashed where estimated
 ← Selected ground water flowline
 (CONTOUR INTERVAL = 2 FEET)

GROUND WATER TABLE CONTOUR MAP
UNCONSOLIDATED AQUIFER
CHEVRON/GULF PHILADELPHIA REFINERY
DARBY CREEK TANK FARM

Dames & Moore

FIGURE 29



KEY:

(CONTOUR INTERVAL = 1 FOOT)

1.47 ● Phase 1 monitoring wells showing product thickness in feet (1-9-87)

D108 ◇ Phase 2 monitoring wells showing product thickness in feet (1-13-87)

1.0 — Product thickness contour

100% Monitoring well Lower Explosive Limit (LEL) reading

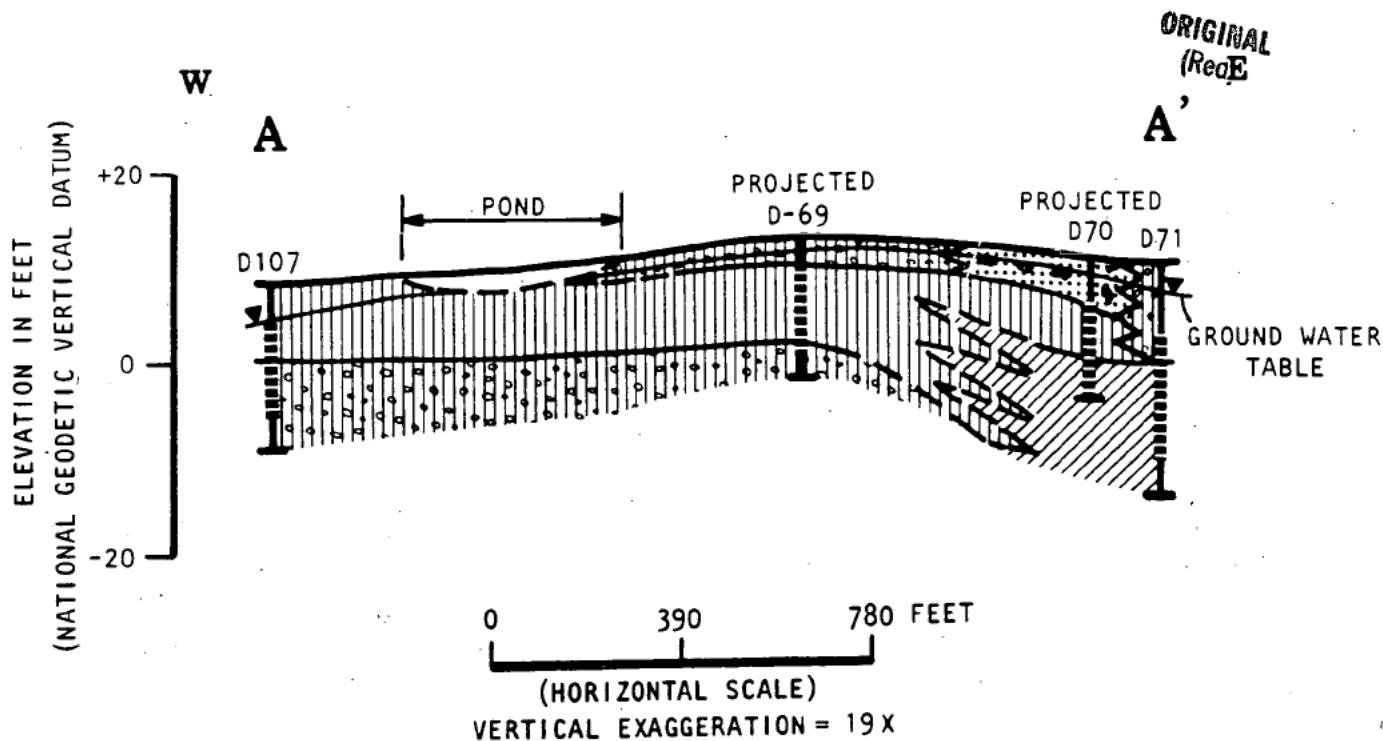
PRODUCT ISOPACH CONTOUR MAP

CHEVRON/GULF PHILADELPHIA REFINERY

DARBY CREEK TANK FARM

Dames & Moore

FIGURE 30



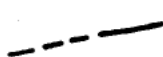
KEY:

D67



MONITORING WELL

MONITORING WELL SHOWING SCREENED INTERVAL



LITHOLOGIC BOUNDARIES; DASHED WHERE ESTIMATED



POORLY GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES



SILTY SANDS, SAND-SILT-GRAVEL MIXTURES



INORGANIC SILTS AND VERY FINE SANDS, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY



INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, SILTY CLAYS

GENERALIZED GEOLOGIC CROSS SECTION A-A'

CHEVRON /GULF PHILADELPHIA REFINERY
DARBY CREEK TANK FARM

NOTE: THE SUBSURFACE SECTION SHOWN REPRESENTS OUR EVALUATION OF THE MOST PROBABLE CONDITIONS BASED UPON INTERPRETATION OF PRESENTLY AVAILABLE DATA. SOME VARIATIONS FROM THESE CONDITIONS MUST BE EXPECTED.

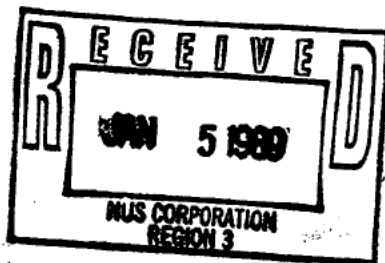
| ORIGINAL (Red) | MONITORING WELL | DEPTH OF BORING (FT) | DEPTH OF WELL (FT) | DEPTH OF SCREENED INTERVAL (FT) | TOP OF WELL CASING ELEVATION (NGVD) | GROUND ELEVATION (NGVD) | DEPTH TO PRODUCT (FT) | DEPTH TO WATER (FT) | PRODUCT THICKNESS (FT) | GROUND WATER ELEVATION (NGVD) | CORRECTED GROUND WATER ELEVATION** (NGVD) | DATE | COMMENTS |
|-------------------|--------------------|-------------------------------|-----------------------------|---|--|-------------------------------|--------------------------------|------------------------------|------------------------------|--|---|---------|----------|
| | D66 | 15.5 | 12.5 | 2.5-12.5 | 35.23 | 33.50 | | 5.45 | | 29.78 | | 6/04/88 | |
| | D67 | 15.6 | 12.6 | 2.6-12.6 | 16.12 | 12.82 | | 12.84 | | 3.28 | | 6/04/88 | |
| | D68 | 15.5 | 13.5 | 2.5-12.5 | 13.28 | 9.73 | | 4.10 | | 9.18 | | 6/04/88 | |
| | D69 | 25 | 24 | 14-24 | 14.97 | 12.91 | | 4.42 | | 10.55 | | 6/04/88 | |
| | D70 | 15 | 15 | 5-15 | 12.54 | 11.38 | | 2.76 | | 9.78 | | 6/04/88 | |
| | D71 | 25 | 20 | 5-20 | 13.22 | 10.41 | 6.79 | 9.35 | 2.56 | 3.87 | 2.43 | 6/04/88 | |
| | D72 | 15.6 | 14 | 4-14 | 15.58 | 13.76 | | 8.43 | | 7.15 | | 6/04/88 | |
| | D73 | 20 | 20 | 10-20 | 27.02 | 23.97 | | 12.19 | | 14.83 | | 6/04/88 | |
| | D107 | 17 | 12.5 | 2.5-12.5 | 10.27 | 7.27 | | 4.40 | | 5.87 | | 6/04/88 | |
| | D108 | 15 | 14 | 4-14 | 10.87 | 8.37 | | 5.18 | | 5.69 | | 6/04/88 | |
| | D109 | 15 | 12.5 | 2.5-12.5 | 18.31 | 16.10 | | 3.70 | | 14.61 | | 6/04/88 | |

| MONITORING WELL | DEPTH OF BORING (FT) | DEPTH OF WELL (FT) | DEPTH OF SCREENED INTERVAL (FT) | TOP OF WELL CASING ELEVATION (NGVD) | GROUND ELEVATION (NGVD) | DEPTH TO PRODUCT (FT) | DEPTH TO WATER (FT) | PRODUCT THICKNESS (FT) | GROUND WATER ELEVATION (NGVD) | CORRECTED GROUND WATER ELEVATION** (NGVD) | DATE | COMMENTS |
|--------------------|-------------------------------|-----------------------------|---|--|-------------------------------|--------------------------------|------------------------------|------------------------------|--|---|----------|-----------------|
| | D66 | 15.5 | 12.5 | 2.5-12.5 | 35.23 | 33.50 | | 8.46 | | 26.77 | 10/22/88 | |
| | D67 | 15.6 | 12.6 | 2.6-12.6 | 16.12 | 12.82 | | 13.16 | | 2.96 | 10/22/88 | |
| | D68 | 15.5 | 13.5 | 2.5-12.5 | 13.28 | 9.73 | | 4.12 | | 9.16 | 10/22/88 | |
| | D69 | 25 | 24 | 14-24 | 14.97 | 12.91 | | 4.61 | | 10.36 | 10/22/88 | |
| | D70 | 15 | 15 | 5-15 | 12.54 | 11.38 | | 3.96 | | 8.58 | 10/22/88 | |
| | D71 | 25 | 20 | 5-20 | 13.22 | 10.41 | 7.20 | 10.00 | 2.80 | 3.22 | 10/22/88 | HEAVY BLACK OIL |
| | D72 | 15.6 | 14 | 4-14 | 15.58 | 13.76 | | 9.58 | | 6.00 | 10/22/88 | |
| | D73 | 20 | 20 | 10-20 | 27.02 | 23.97 | | | | 27.02 | 10/22/88 | |
| | D107 | 17 | 12.5 | 2.5-12.5 | 10.27 | 7.27 | | 5.56 | | 4.71 | 10/22/88 | |
| | D108 | 15 | 14 | 4-14 | 10.87 | 8.37 | | 5.70 | | 5.17 | 10/22/88 | |
| | D109 | 15 | 12.5 | 2.5-12.5 | 18.31 | 16.10 | | 3.72 | | 14.59 | 10/22/88 | |



Chevron U.S.A. Inc.
P.O. Box 7408, Philadelphia, PA 19101

Philadelphia Refinery



ORIGINAL
(Red)

January 4, 1989

Not responsive due to revised scope

NUS Corporation
999 West Valley Road
Wayne, PA 19087

Dear Nonresponsive based on revised scope:

Attached is the information you requested during your inspection of our Darby Creek Tank Farm facility on December 7, 1988. This information is supplied in order to comply with your request as authorized in Section 307 of RCRA, Section 300 of the Clean Water Act, and Section 104 of CERCLA as amended by SARA 1986. The information is as follows:

- 1) Three (3) months of Discharge Monitoring Reports for DC-8 Separator (Sept., Oct., Nov. 1988).
- 2) Results of a lead study conducted by Dames & Moore as part of our most recent underground site assessment.

To answer your question regarding any chemical analysis results for the existing wells, no testing was performed.

Questions regarding this subject should be directed to Mr. Frank Hannigan at (215) 339-7466.

Very truly yours,

E. V. Schneider
Supervisor
Environmental Engineering

FLH/tml
attachments

PERMITTEE NAME/A Facility Name/Location, Different

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

For Approved
OMB No. 2040-0004
Expires 2-29-84

NAME CHEVRON U.S.A. INC.
ADDRESS PHILADELPHIA REFINERY
P.O. BOX 7408
PHILADELPHIA, PA 19101
FACILITY DARBY CREEK TANK FARM
LOCATION DARBY TOWNSHIP, DELAWARE COUNTY, PA

PA0011541
PERMIT NUMBER

001
DISCHARGE NUMBER

DC-8 SEPARATOR STORMWATER

| MONITORING PERIOD | | | | | |
|-------------------|---------|---------|---------|---------|---------|
| YEAR | MO | DAY | YEAR | MO | DAY |
| 88 | 11 | 01 | 88 | 11 | 30 |
| (20-21) | (22-23) | (24-25) | (26-27) | (28-29) | (30-31) |

NOTE: Read instructions before completing this form.

| PARAMETER (32-37) | | (3 Card Only) QUANTITY OR LOADING (46-53) | | | (4 Card Only) QUALITY OR CONCENTRATION (38-45) | | | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|----------------------|--------------------|---|---------|-------|--|-----------------|------------------------|----------------------|--|---------------------------|
| | | AVERAGE | MAXIMUM | UNITS | MINIMUM | AVERAGE | MAXIMUM | | | |
| FLOW | SAMPLE MEASUREMENT | 0.2144 | ***** | MGD | ***** | ***** | ***** | 0 | Est. | MEAS |
| | PERMIT REQUIREMENT | ***** | ***** | | ***** | ***** | ***** | | 1/30 | MEAS |
| OIL AND GREASE | SAMPLE MEASUREMENT | ***** | ***** | ***** | ***** | < 1 | < 1 | 0 | 1/30 | GRAB |
| | PERMIT REQUIREMENT | ***** | ***** | | ***** | 15 DAILY AVG | 30 INSTANTANEOUS | | 1/30 | GRAB |
| TOTAL DISSOLVED IRON | SAMPLE MEASUREMENT | ***** | ***** | ***** | ***** | ***** | < .1 | 0 | 1/30 | GRAB |
| | PERMIT REQUIREMENT | ***** | ***** | | ***** | ***** | 7 INSTANTANEOUS | | 1/30 | GRAB |
| PHENOLS | SAMPLE MEASUREMENT | ***** | ***** | ***** | ***** | ***** | .005 | 0 | 1/30 | GRAB |
| | PERMIT REQUIREMENT | ***** | ***** | | ***** | ***** | 0.010 INSTANTANEOUS | | 1/30 | GRAB |
| pH | SAMPLE MEASUREMENT | ***** | ***** | ***** | ***** | 7.6 | ***** | 0 | 1/30 | GRAB |
| | PERMIT REQUIREMENT | ***** | ***** | 6.0 | ***** | ***** | 9.0 | | 1/30 | GRAB |
| | SAMPLE MEASUREMENT | | | | | | | | | |
| | PERMIT REQUIREMENT | | | | | | | | | |
| | SAMPLE MEASUREMENT | | | | | | | | | |
| | PERMIT REQUIREMENT | | | | | | | | | |

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

M. J. HOLMES
GENERAL MANAGER

TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT. SEE 18 USC § 1001 AND 33 USC § 1319. (Penalties under these statutes may include fines up to \$10,000 and/or maximum imprisonment of between 6 months and 5 years.)

SIGNATURE OF PRINCIPAL EXECUTIVE
OFFICER OR AUTHORIZED AGENT

TELEPHONE

215 3397233

AREA
CODE

NUMBER

DATE

88 12

YEAR MO DAY

ORIGINAL
(per)

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

PERMITTEE NAME ADDRESS (Include Facility Name/Location if different)

NAME CHEVRON U.S.A. INC.
ADDRESS PHILADELPHIA REFINERY
P.O. BOX 7408
PHILADELPHIA, PA 19101
FACILITY DARBY CREEK TANK FARM
LOCATION DARBY TOWNSHIP, DELAWARE COUNTY, PA

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)
(2-16) (17-19)

PA0011541
PERMIT NUMBER

001
DISCHARGE NUMBER

Jrm Approved
OMB No. 2040-000-
Expires 2-29-84

DC-8 SEPARATOR STORMWATER

| MONITORING PERIOD | | | | | | |
|-------------------|---------|---------|----|---------|---------|---------|
| YEAR | MO | DAY | TO | YEAR | MO | DAY |
| 88 | 10 | 01 | | 88 | 10 | 31 |
| (20-21) | (22-23) | (24-25) | | (26-27) | (28-29) | (30-31) |

NOTE: Read instructions before completing this form.

| PARAMETER (32-37) | | (3 Card Only) QUANTITY OR LOADING (46-53) | | | (4 Card Only) QUALITY OR CONCENTRATION (54-61) | | | | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|----------------------|--------------------|---|---------|-------|--|-----------------|------------------------|-------|----------------------|--|---------------------------|
| | | AVERAGE | MAXIMUM | UNITS | MINIMUM | AVERAGE | MAXIMUM | UNITS | | | |
| FLOW | SAMPLE MEASUREMENT | 0.0867 | ***** | MGD | ***** | ***** | ***** | ***** | 0 | EST. | MEAS |
| | PERMIT REQUIREMENT | ***** | ***** | | ***** | ***** | ***** | | | 1/30 | MEAS |
| OIL AND GREASE | SAMPLE MEASUREMENT | ***** | ***** | | ***** | 4 | 4 | MG/L | 0 | 1/31 | GRAB |
| | PERMIT REQUIREMENT | ***** | ***** | | ***** | 15 DAILY AVG | 30 INSTANTANEOUS | | | 1/30 | GRAB |
| TOTAL DISSOLVED IRON | SAMPLE MEASUREMENT | ***** | ***** | | ***** | ***** | < 0.1 | MG/L | 0 | 1/31 | GRAB |
| | PERMIT REQUIREMENT | ***** | ***** | | ***** | ***** | 7 INSTANTANEOUS | | | 1/30 | GRAB |
| PHENOLS | SAMPLE MEASUREMENT | ***** | ***** | | ***** | ***** | .001 | MG/L | 0 | 1/31 | GRAB |
| | PERMIT REQUIREMENT | ***** | ***** | | ***** | ***** | 0.010 INSTANTANEOUS | | | 1/30 | GRAB |
| PH | SAMPLE MEASUREMENT | ***** | ***** | | ***** | 7.6 | ***** | SU | 0 | 1/31 | GRAB |
| | PERMIT REQUIREMENT | ***** | ***** | | 6.0 | ***** | 9.0 | | | 1/30 | GRAB |
| | SAMPLE MEASUREMENT | | | | | | | | | | |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| | SAMPLE MEASUREMENT | | | | | | | | | | |
| | PERMIT REQUIREMENT | | | | | | | | | | |

| | | | |
|--|---|------------------|-------------|
| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. (Penalties under these statutes may include fines up to \$100,000 and/or maximum imprisonment of between 6 months and 5 years.) | TELEPHONE | DATE |
| M. J. HOLMES GENERAL MANAGER | | | |
| TYPED OR PRINTED | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | 215 3397233 | 88 16 |
| COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here) | | AREA CODE NUMBER | YEAR MO DAY |

PERMITTEE NAME/
Facility Name/Location

LESS (Include
if different)

NATIONAL POLLUTANT ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

(2-16)

(17-19)

Approved
OMB No. 2040-0004
Expires 2-29-84

NAME CHEVRON U.S.A. INC.
ADDRESS PHILADELPHIA REFINERY
P.O. BOX 7408
PHILADELPHIA, PA 19101
FACILITY DARBY CREEK TANK FARM
LOCATION DARBY TOWNSHIP, DELAWARE COUNTY, PA

PA0011541
PERMIT NUMBER

001
DISCHARGE NUMBER

DC-8 SEPARATOR STORMWATER

| MONITORING PERIOD | | | | | | | |
|-------------------|---------|---------|---------|----|---------|---------|---------|
| FROM | YEAR | MO | DAY | TO | YEAR | MO | DAY |
| | 88 | 09 | 01 | | 88 | 09 | 30 |
| | (20-21) | (22-23) | (24-25) | | (26-27) | (28-29) | (30-31) |

NOTE: Read instructions before completing this form.

| PARAMETER (32-37) | X | (3 Card Only) QUANTITY OR LOADING (46-53) | | | (4 Card Only) QUALITY OR CONCENTRATION (54-61) | | | NO. EX (62-63) | FREQUENCY OF ANALYSIS (64-68) | SAMPLE TYPE (69-70) |
|----------------------|--------------------|---|---------|-------|--|------------------------|---------------------|----------------------|--|---------------------------|
| | | AVERAGE | MAXIMUM | UNITS | MINIMUM | AVERAGE | MAXIMUM | | | |
| FLOW | SAMPLE MEASUREMENT | 0.1087 | ***** | MGD | ***** | ***** | ***** | 0 | Est. | MEAS |
| | PERMIT REQUIREMENT | ***** | ***** | | ***** | ***** | ***** | | 1/30 | MEAS |
| OIL AND GREASE | SAMPLE MEASUREMENT | ***** | ***** | | ***** | <1 | <1 | 0 | 1/30 | GRAB |
| | PERMIT REQUIREMENT | ***** | ***** | | ***** | 15 DAILY AVG | 30 INSTANTANEOUS | | 1/30 | GRAB |
| TOTAL DISSOLVED IRON | SAMPLE MEASUREMENT | ***** | ***** | | ***** | 0.76 | | 0 | 1/30 | GRAB |
| | PERMIT REQUIREMENT | ***** | ***** | | ***** | 7 INSTANTANEOUS | | | 1/30 | GRAB |
| PHENOLS | SAMPLE MEASUREMENT | ***** | ***** | | ***** | .001 | | 0 | 1/30 | GRAB |
| | PERMIT REQUIREMENT | ***** | ***** | | ***** | 0.010 INSTANTANEOUS | | | 1/30 | GRAB |
| PH | SAMPLE MEASUREMENT | ***** | ***** | | ***** | 7.4 | ***** | 0 | 1/30 | GRAB |
| | PERMIT REQUIREMENT | ***** | ***** | | 6.0 | ***** | 9.0 | | 1/30 | GRAB |
| | SAMPLE MEASUREMENT | | | | | | | | | |
| | PERMIT REQUIREMENT | | | | | | | | | |
| | SAMPLE MEASUREMENT | | | | | | | | | |
| | PERMIT REQUIREMENT | | | | | | | | | |

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|--|---|-------------|------|----|-----|
| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN, AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT. SEE 18 USC § 1001 AND 33 USC § 1319. (Penalties under these statutes may include fines up to \$10,000 and/or maximum imprisonment of between 6 months and 5 years.) | TELEPHONE | DATE | | |
| M. J. HOLMES GENERAL MANAGER | | | | | |
| TYPED OR PRINTED | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | 215 3397233 | 88 | 10 | |
| COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here) | AREA CODE | NUMBER | YEAR | MO | DAY |

TABLE 4

RESULTS OF LEAD ANALYSIS - SOIL
CHEVRON/GULF PHILADELPHIA REFINERY
DARBY CREEK [REDACTED]

| <u>Sample I.D.# and Location</u> | <u>Sample Depth (ft)</u> | <u>Lead Concentrations (ppm)</u> |
|--|----------------------------------|--|
| DTP-1A | 1.5 - 3.0 | 52 |
| DTP-1B | 0.0 - 5.0 | 83 |
| DTP-2A | 0.0 - 2.5 | 37 |
| DTP-2B | 2.5 - 5.0 | 14 |
| [REDACTED] | [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] | [REDACTED] |

Key:DTP - Darby Creek Test Pit
[REDACTED]

- Notes:
1. Test pit locations provided on Figures 3 and 4.
 2. Test pit logs provided in Appendix C.
 3. Laboratory Analysis performed by Century Laboratories of Thorofare, N.J.
 4. Laboratory Reports provided in Appendix D.

0609R

ATTACHMENT 3

This initial notification information is required by Section 103(c) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 and must be mailed by June 9, 1981.

Please type or print in ink. If you need additional space, use separate sheets of paper. Indicate the letter of the item which applies.

ORIGINAL
(Red)

PAT000647271

Person Required to Notify:

Enter the name and address of the person or organization required to notify.

Name Gulf Oil Corp. Darby Creek Tank Farm

Street P. O. Box 7408

City Philadelphia

State PA

Zip Code 19101

Site Location:

Enter the common name (if known) and actual location of the site.

Name of Site Gulf Oil Company - U. S. - Darby Creek Tank Farm

Street Calcon Hook and Hook Roads

City Darby Township County Delaware

State PA

Zip Code

Person to Contact:

Enter the name, title (if applicable), and business telephone number of the person to contact regarding information submitted on this form.

Name (Last, First and Title) Williams, John H. - Director Process Engineer

Phone (215)339-7125

Dates of Waste Handling:

Enter the years that you estimate waste treatment, storage, or disposal began and ended at the site.

From (Year) 1949

To (Year) 1979

Waste Type: Choose the option you prefer to complete

Option 1: Select general waste types and source categories. If you do not know the general waste types or sources, you are encouraged to describe the site in Item I—Description of Site.

General Type of Waste:

Place an X in the appropriate boxes. The categories listed overlap. Check each applicable category.

Source of Waste:

Place an X in the appropriate boxes.

1. ☐ Organics
2. ☐ Inorganics
3. ☐ Solvents
4. ☐ Pesticides
5. ☒ Heavy metals
6. ☒ Acids
7. ☒ Bases
8. ☐ PCBs
9. ☐ Mixed Municipal Waste
10. ☐ Unknown
11. ☒ Other (Specify)
Oil Solids

1. ☐ Mining
2. ☐ Construction
3. ☐ Textiles
4. ☐ Fertilizer
5. ☐ Paper/Printing
6. ☐ Leather Tanning
7. ☐ Iron/Steel Foundry
8. ☐ Chemical, General
9. ☐ Plating/Polishing
10. ☐ Military/Ammunition
11. ☐ Electrical Conductors
12. ☐ Transformers
13. ☐ Utility Companies
14. ☐ Sanitary/Refuse
15. ☐ Photofinish
16. ☐ Lab/Hospital
17. ☐ Unknown
18. ☒ Other (Specify)
Petroleum
Industry

Option 2: This option is available to persons familiar with the Resource Conservation and Recovery Act (RCRA) Section 3001 regulations (40 CFR Part 261).

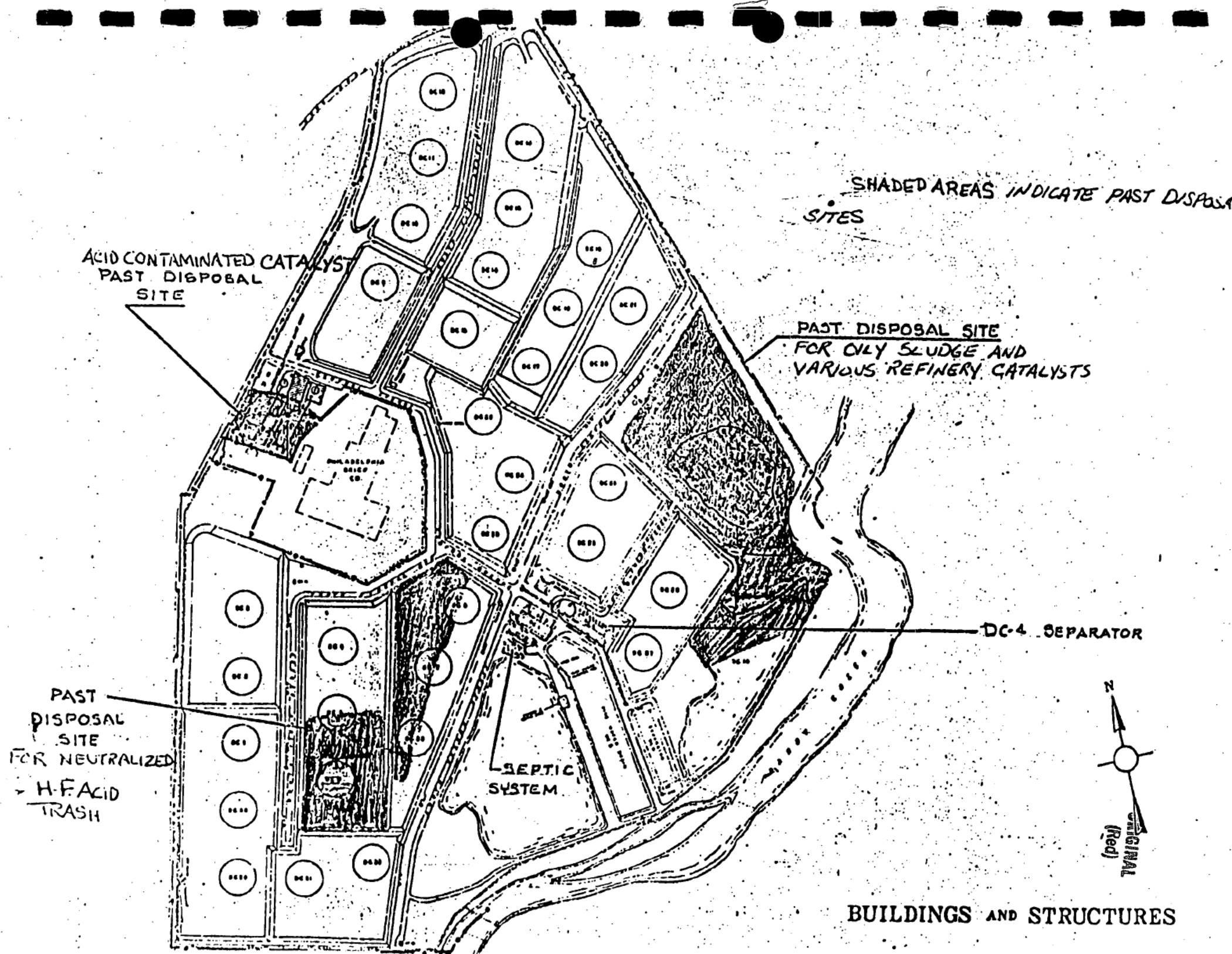
Specific Type of Waste:

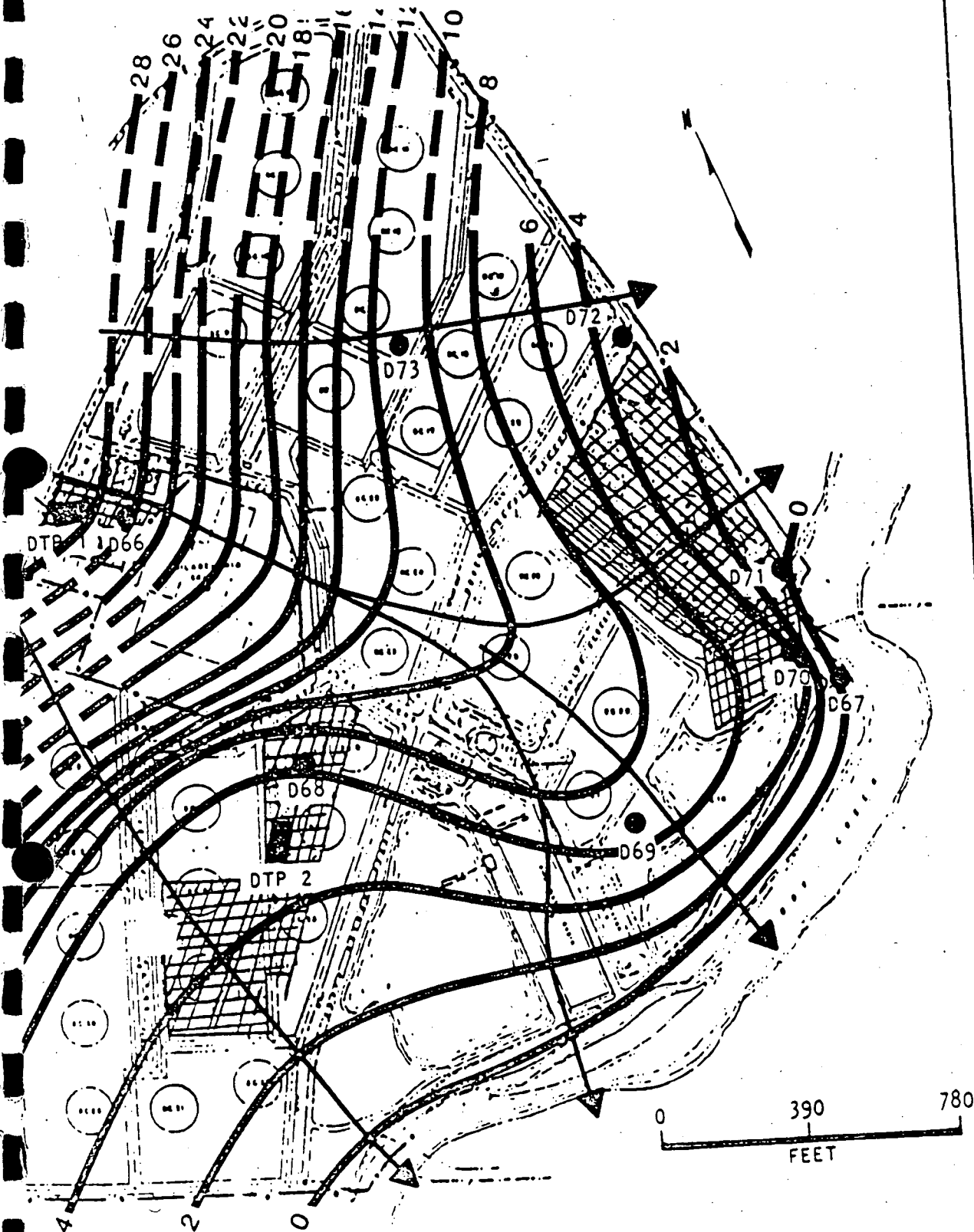
EPA has assigned a four-digit number to each hazardous waste listed in the regulations under Section 3001 of RCRA. Enter the appropriate four-digit number in the boxes provided. A copy of the list of hazardous wastes and codes can be obtained by contacting the EPA Region serving the State in which the site is located.

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- KEY:
- MONITORING WELLS
 - TEST PITS
 - WATER TABLE ELEVATION CONTOUR
 - SELECTED GROUND WATER FLOW LINE

(CONTOUR INTERVAL = 2 FEET)

NOTE: ELEVATIONS BASED ON ARBITRARY DATUM - (NOT MEAN SEA LEVEL)

GROUND WATER

TOUR MAP

APPENDIX E

GROUNDWATER

ORIGINAL
(Red)

Gulf Oil Chemicals Company

Note: Chevron was not
aware that this notification
was filed by Gulf Chemical

June 5, 1981

P. O. Box 3766
Houston, TX 77001

RECEIVED
RCRA SECTION
EPA REGION III
JUN 9 80C00363

U.S. Environmental Protection Agency
Region III
Sites Notification
Philadelphia, PA 19106

Dear Sirs:

Pursuant with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, PL 96-510, Section 103(c), Gulf Oil Chemicals Company, a Division of Gulf Oil Corporation, is providing notification of hazardous waste activities for our facilities located in Region III.

Gulf Oil Refining and Marketing Company
Philadelphia Refinery (Petrochemicals)
P. O. Box 7408
30th Street and Penrose Avenue
Philadelphia, PA 19101

Gulf Oil Chemicals Company
Gulf Adhesives and Resins
632 North Cannon Avenue
Lansdale, PA 19446

Gulf Oil Chemicals Company participated in the 1979 Eckhardt Survey. Copies of the survey response for each of the above mentioned facilities are attached. These survey responses, along with notification under Section 3010 of the Resource Conservation and Recovery Act, accurately represent our waste activities at these facilities. Should you have any questions, please feel free to contact me at (713) 754-3288.

Dennis L. Caputo
D. L. Caputo
Coordinator, Environmental Affairs

ab

Attachments

EPA Notification of Hazardous Waste Site

United States
Environmental Protection
Agency
Washington, DC 20460

This initial notification information is required by Section 103(c) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 and must be mailed by June 9, 1981.

Please type or print in ink. If you need additional space, use separate sheets of paper. Indicate the letter of the item which applies.

R

TE

PAS000001-5206

A Person Required to Notify:

Enter the name and address of the person or organization required to notify.

Name Phila. Refinery (Petrochemicals)
Street P.O. Box 740 30th St. + PENROSE A
City Phila. State Pa Zip Code 19101

3 Site Location:

Enter the common name (if known) and actual location of the site.

Name of Site Darby Creek Tank Farm.
Street Calgon Hook + Hook Rd.
City Darby County Del State Pa Zip Code 99999

Person to Contact:

Enter the name, title (if applicable), and business telephone number of the person to contact regarding information submitted on this form.

Name (Last, First and Title) McBride, W.R. Advisor
Phone 215-539-7399

LUCAS, Bill Super. ENVR
Eng

Dates of Waste Handling:

Enter the years that you estimate waste treatment, storage, or disposal began and ended at the site.

From (Year) 1963 To (Year) 1967

PAD-98-055-2590

Waste Type: Choose the option you prefer to complete

Option 1: Select general waste types and source categories. If you do not know the general waste types or sources, you are encouraged to describe the site in Item 1—Description of Site.

General Type of Waste:

Place an X in the appropriate boxes. The categories listed overlap. Check each applicable category.

1. ☐ Organics
2. ☐ Inorganics
3. ☐ Solvents
4. ☐ Pesticides
5. ☐ Heavy metals
6. ☐ Acids
7. ☐ Bases
8. ☐ PCBs
9. ☐ Mixed Municipal Waste
10. ☐ Unknown
11. ☒ Other (Specify)

Source of Waste:

Place an X in the appropriate boxes.

1. ☐ Mining
2. ☐ Construction
3. ☐ Textiles
4. ☐ Fertilizer
5. ☐ Paper/Printing
6. ☐ Leather Tanning
7. ☐ Iron/Steel Foundry
8. ☐ Chemical, General
9. ☐ Plating/Polishing
10. ☐ Military/Ammunition
11. ☐ Electrical Conductors
12. ☐ Transformers
13. ☐ Utility Companies
14. ☐ Sanitary/Refuse
15. ☐ Photofinish
16. ☐ Lab/Hospital
17. ☐ Unknown
18. ☐ Other (Specify)

Option 2: This option is available to persons familiar with the Resource Conservation and Recovery Act (RCRA) Section 3001 regulations (40 CFR Part 261).

Specific Type of Waste:

EPA has assigned a four-digit number to each hazardous waste listed in the regulations under Section 3001 of RCRA. Enter the appropriate four-digit number in the boxes provided. A copy of the list of hazardous wastes and codes can be obtained by contacting the EPA Region serving the State in which the site located.

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N

Notification of Hazardous Waste Site

Side Two

Waste Quantity:

Place an X in the appropriate boxes to indicate the facility types found at the site.

In the "total facility waste amount" space give the estimated combined quantity (volume) of hazardous wastes at the site using cubic feet or gallons.

In the "total facility area" space, give the estimated area size which the facilities occupy using square feet or acres.

Facility Type

1. ☐ Piles
2. ☐ Land Treatment
3. ☒ Landfill
4. ☐ Tanks
5. ☐ Impoundment
6. ☐ Underground Injection
7. ☐ Drums, Above Ground
8. ☐ Drums, Below Ground
9. ☒ Other (Specify) _____

Total Facility Waste Amount ^{ORIGINAL}

~~cubic feet~~ 8 H (Red)

gallons

Total Facility Area

square feet

acres

Known, Suspected or Likely Releases to the Environment:

Place an X in the appropriate boxes to indicate any known, suspected, or likely releases of wastes to the environment.

☐ Known ☐ Suspected ☐ Likely ☐ None

Note: Items Hand I are optional. Completing these items will assist EPA and State and local governments in locating and assessing hazardous waste sites. Although completing the items is not required, you are encouraged to do so.

Sketch Map of Site Location: (Optional)

Sketch a map showing streets, highways, routes or other prominent landmarks near the site. Place an X on the map to indicate the site location. Draw an arrow showing the direction north. You may substitute a publishing map showing the site location.

Description of Site: (Optional)

Describe the history and present conditions of the site. Give directions to the site and describe any nearby wells, springs, lakes, or housing. Include such information as how waste was disposed and where the waste came from. Provide any other information or comments which may help describe the site conditions.

Signature and Title:

The person or authorized representative (such as plant managers, superintendents, trustees or attorneys) of persons required to notify must sign the form and provide a mailing address (if different than address in item A). For other persons providing notification, the signature is optional. Check the boxes which best describe the relationship to the site of the pers:

Name

Street

City

State

Zip Code

- ☐ Owner, Present
☐ Owner, Past
☐ Transporter
☐ Operator, Present
☐ Operator, Past
☐ Other

ENVIRONMENTAL PROTECTION AGENCY
NOTIS DATA MANAGEMENT SYSTEM
COMMENT MAINTENANCE FORM

CARD
CODE NTS IDENTIFICATION NO. *SAITS. MISC. 300*
F 1 2 13 14 15 16 C 55 56 58 80 SI

NTS IDENTIFICATION NO. *CATALYSTS (eg. VANADIUM, PLATINUM) 301*
2 13 14 15 16 C 55 56 58 SI

CARD
CODE NTS IDENTIFICATION NO. *Palladium Py Alum Chloride 302*
F 1 2 13 14 15 16 C 55 56 58 SI

CARD
CODE NTS IDENTIFICATION NO.
F 1 2 13 14 15 16 C 55 56 58 SI

CARD
CODE NTS IDENTIFICATION NO.
F 1 2 13 14 15 16 C 55 56 58 SI

ORIGINAL
(Red)

FORM A: GENERAL FACILITY INFORMATION

RECEIVED
RCRA SECTION
EPA REGION III

1 1 1 1 (1-5)
(DO NOT USE)

Company Name: Gulf Oil Refining & Marketing Co. - A division of Gulf Oil Corporation
Facility Name: Philadelphia Refinery (Petrochemicals)

Address: P. O. Box 7408 - 30th St. & Penrose Avenue
No. Street
Philadelphia, PA 19101
City State Zip Code

Name of Person Completing Form: W. R. McBride

Position: Advisor Environmental Affairs

Phone Number: (215) 339-7399

1. Year Facility Opened 19 60 (10-11)
2. Primary SIC Code : 2911 (12-15)
3. Estimate the total amounts of process wastes (excluding wastes sold for use) generated by this facility during 1978:
 - thousand gallons 1 (16-24)
 - hundred tons 3 (25-32)
 - thousand cubic yards 1 (33-41)
4. Estimate (in whole percents) how these process wastes generated in 1978 were disposed of:
 - in landfill 100 (42-44)
 - in pit/pond/lagoon 1 (45-47)
 - in deep well 1 (48-50)
 - incinerated 1 (51-53)
 - reprocessed/recycled 1 (54-56)
 - evaporated 1 (57-59)
 - unknown 1 (60-62)
 - other (Specify _____) 1 (63-65)
5. What is the total number of known sites (including disposal on the property where this facility is located as one site) that have been used for the disposal of process wastes from this facility since 1950? 13 (66-68)

COMPLETE ONE FORM "B" FOR EACH OF THE SITES
6. Have any of the process wastes generated at this facility been hauled (removed) from this facility for disposal? (Yes=1; no=2) 1 (69)

IF YES, COMPLETE FORM "C"
7. Do you know the disposal site locations of all of the process waste hauled from your facility since 1950? (Yes=1; no=2) 2 (70)

IF NO, COMPLETE ONE FORM "D" FOR EACH FIRM OR CONTRACTOR WHO TOOK WASTE TO AN UNKNOWN LOCATION
8. Specify the earliest year represented by information from company or facility records supplied on this and other forms 19 63 (71-72)
9. Specify the earliest year represented by information from employee knowledge supplied on this and other forms 19 50 (73-74)

PROVIDE A COMPLETE LIST OF ALL FIRMS AND INDEPENDENT CONTRACTORS,
INCLUDING THE COMPANY AND ITS AFFILIATES AND SUBSIDIARIES, USED
TO REMOVE PROCESS WASTES FROM THIS FACILITY SINCE 1950.

ORIGINAL
(Red)

Company Name: Gulf Refining & Marketing Co.

Facility Name: Philadelphia Refinery

| <u>Name of Firm or Contractor</u> | <u>Address</u> | <u>ICC # (If Known)</u> | <u>Years Used</u> |
|-----------------------------------|--|-----------------------------|--------------------------|
| Eastern Industrial Corp. | P. O. Box 36 Bedford, NJ 08096 | | March 1971-1977 |
| Casper Brothers | 4717 Torresdale Ave. Phila., PA 19124 | | April March 1977-1978 |
| Tricounty Haulers | 1777 Calcon Hook Rd. Darby, PA | | April March 1978-1979 |
| Casper Brothers | 4717 Torresdale Ave. Phila., PA 19124 | | April March 1979-1980 |

Facility Name: Philadelphia Refinery

ORIGINAL

(Red)

Site Name: Darby Creek Tank Farm

9. Components (or characteristics) of process waste from this facility disposed at site: (1=present in waste; 2=not present in waste; 9=don't know)

FILL IN EVERY BLOCK SPACE

| | | |
|--|---|---|
| Acid solutions, with pH < 3 | | |
| pickling liquor | 2 | 1 |
| metal plating waste | 2 | 1 |
| circuit etchings | 2 | 1 |
| inorganic acid manufacture | 2 | 1 |
| organic acid manufacture | 2 | 1 |
| Base solutions, with pH > 10 | | |
| caustic soda manufacture | 2 | 1 |
| nylon and similar polymer generation | 2 | 1 |
| scrubber residual | 2 | 1 |
| Heavy metals & trace metals (bonded organically & inorganically) | | |
| arsenic, selenium, antimony | 2 | 1 |
| mercury | 2 | 1 |
| iron, manganese, magnesium | 2 | 1 |
| zinc, cadmium, copper, chromium (trivalent) | 2 | 1 |
| chromium (hexavalent) | 2 | 1 |
| lead | 2 | 1 |
| Radioactive residues, > 3 pico curies/liter | | |
| uranium residuals & residuals for UF ₆ recycling | 2 | 1 |
| lanthanide series elements and rare earth salts | 2 | 1 |
| phosphate slag | 2 | 1 |
| thorium | 2 | 1 |
| radium | 2 | 1 |
| other alpha, beta & gamma emitters | 2 | 1 |
| Organics | | |
| pesticides & intermediates | 2 | 1 |
| herbicides & intermediates | 2 | 1 |
| fungicides & intermediates | 2 | 1 |
| rodenticides & intermediates | 2 | 1 |
| halogenated aliphatics | 2 | 1 |
| halogenated aromatics | 2 | 1 |
| acrylates & latex emulsions | 2 | 1 |
| PCB/PBB's | 2 | 1 |
| amides, amines, imides | 2 | 1 |
| plastizers | 2 | 1 |
| resin | 2 | 1 |
| elastomers | 2 | 1 |
| solvents polar (except water) | 2 | 1 |
| carbontetrachloride | 2 | 1 |
| trichloroethylene | 2 | 1 |
| other solvents nonpolar | 2 | 1 |
| solvents halogenated aliphatic | 2 | 1 |
| solvents halogenated aromatic | 2 | 1 |
| oils and oil sludges | 2 | 1 |
| esters and ethers | 2 | 1 |
| alcohols | 2 | 1 |
| ketones & aldehydes | 2 | 1 |
| dioxins | 2 | 1 |
| Inorganics | | |
| salts | 2 | 1 |
| mercaptans | 2 | 1 |
| Misc | | |
| pharmaceutical wastes | 2 | 1 |
| paints & pigments | 2 | 1 |
| catalysts (eg. vanadium, platinum, palladium) | 2 | 1 |
| asbestos | 2 | 1 |
| shock sensitive wastes (eg. nitrated toluenes) | 2 | 1 |
| air water reactive wastes (eg. P ₄ , aluminum chloride) | 2 | 1 |
| wastes with flash point below 100° F | 2 | 1 |

COMPLETE THIS FORM FOR EVERY SITE (INCLUDING THE LOCATION OF THIS FACILITY AS ONE SITE) USED FOR THE DISPOSAL OF PROCESS WASTES GENERATED BY THIS FACILITY SINCE 1950.

RECEIVED
RCRA SECTION
EPA REGION I
ORIGINAL
JUN 1980 0000 13

Company Name: Gulf Refining & Marketing Co. - Div. of Gulf Oil Corporation
Facility Name: Philadelphia Refinery
Name of Site: Darby Creek Tank Farm
Address of Site: _____
no. street

city state zip code

Name of Owner (while used by facility): Gulf Oil Corporation
Address: P. O. Box 7408
no. street

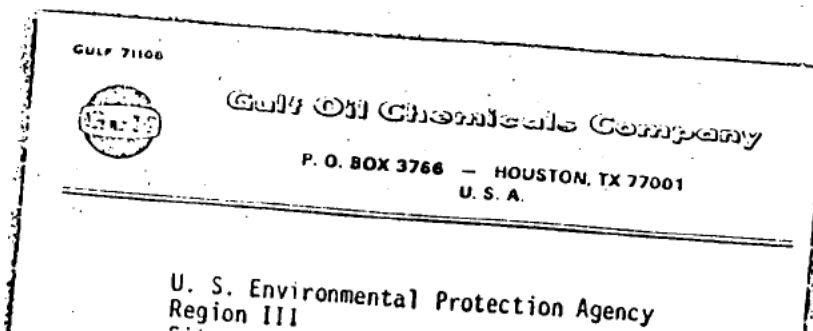
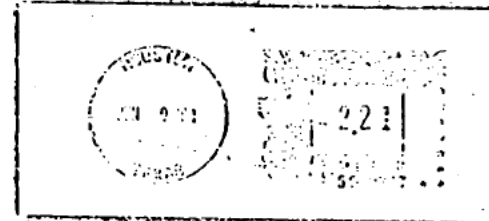
Philadelphia PA 19101
city state zip code

Current Owner (if different from above): _____
Address: _____
no. street

city state zip code

1. Location (1= the property on which facility is located; 2= off-site)..... 1 (10)
2. Ownership at time of use (1= company ownership; 2=private but not company ownership) 3=public ownership) 1 (11)
3. Current status (1= closed; 2= still in use; 9=don't know) 1 (12)
IF CLOSED, specify year closed 196 (13-14)
4. Year first used for process waste from this facility 196 (15-16)
5. Year last used for process waste from this facility (enter "79" if still in use) 196 (17-18)
6. Total amount of process waste from this facility disposed at site:
thousand gallons 1 (19-20)
hundred tons 1 (21-22)
thousand cubic yards 1 (23-24)
7. Specify type(s) of disposal method(s) used at site and whether method is still in use (1=currently in use; 2=no longer in use; 3=never used; 9=don't know)
landfill, mono industrial waste 1 (42)
landfill, mixed industrial waste 1 (43)
landfill, drummed waste 1 (44)
landfill, municipal refuse co-disposed ... 1 (45)
pits/ponds/lagoons 1 (46)
deep well injection 1 (47)
land farming 1 (48)
incineration 1 (49)
treatment (eg. neutralizing)..... 1 (50)
reprocessing/recycling 1 (51)
other (specify) 1 (52)
8. Users of this site (1=this facility; 2=this facility and other company facilities only; 3=this company and others; 9=don't know) 1 (53)

LIST NAMES AND ADDRESSES OF OTHER KNOWN USERS BELOW



ORIGINAL
(Red)

| | | | |
|---|--|--|--|
| RECORD OF COMMUNICATION | | <input checked="" type="checkbox"/> PHONE CALL <input type="checkbox"/> DISCUSSION <input type="checkbox"/> FIELD TRIP <input type="checkbox"/> CONFERENCE <input type="checkbox"/> OTHER (SPECIFY) | |
| TO: <i>Mr. Bill Lucas.</i> | | FROM: <i>J. H. M. [unclear]</i> | |
| SUBJECT: | | (Record of item checked above) DATE: <i>8-3-81</i> TIME: <i>11:40</i> | |
| SUMMARY OF COMMUNICATION <p> <i>Mr. McBride, the person listed to contact has been transferred to TX. Mr. Lucas was able to help & his name was entered in place of Mr. McBride's.</i> </p> <p> <i>Mr. Lucas was able to provide me with location of site listed in Sec. 8.</i> </p> <p> <i>Note: Darby Creek Tank Farm Calgon Hook & Hook Rd. Darby, Del. Pa. (No zip code)</i> </p> | | | |
| CONCLUSIONS, ACTION TAKEN OR REQUIRED <p> <i>Processed with 5 9's (99999)</i> </p> | | | |
| INFORMATION COPIES TO: | | | |

HAZARDOUS WASTE INSPECTION REPORT
Generators - Part A

ORIGINAL
(Red)

Date of inspection 02/18/87 Time start _____ Time finish _____

Name of inspector Georgia Kagle

Company, installation name Darby Creek Tank Farm (Chevron)

Location Calcon Hook - Hook Rds.

County Delaware Municipality Darby Township

Identification number PAD980555254

Name of responsible official John H. Williams

Title Director of Process Engineering

Mailing address PO Box 7404 Philadelphia Pa 19101

Area code and phone no. 215-339-7466

Name of person interviewed Frank Hannigan

Title Same

Mailing address (if different from above) Same

Area code and phone no. Same

1. Current waste handling method:

- a. ☐ On-site ☐ treatment ☐ storage, ☐ disposal
b. ☐ On-site ☐ use, ☐ reuse, ☐ recycle, ☐ reclaim
c. ☐ Off-site ☐ treatment, ☐ storage, ☐ disposal
d. ☐ Off-site ☐ use, ☐ reuse, ☐ recycle, ☐ reclaim

2. Amount of hazardous waste produced:

- a. _____ kg./mo. Not generating
b. _____ kg./yr.

3. Types of hazardous waste produced by Hazardous Waste Number:

4. None
Are hazardous wastes transported off-site by the generator? ☐ Yes ☒ No

HAZARDOUS WASTE INSPECTION REPORT
Part C - Comments

ORIGINAL
(Red)

Date of Inspection 2/18/87 Identification Number PA0780555-254
Company, Installation Name Gulf Oil Tank Farm
City Dul Municipality Darby

The facility does not generate any hazardous waste. They would like to maintain a PATA due to the nature of the industry, in the event that HLD should be generated in the future.

The tank farm is a storage facility for crude oil.

Inspection report is official notification that a representative of the Department of Environmental Resources, Bureau of Solid Waste Management, inspected the above installation. Findings of this inspection are shown in this report. Any violations which were uncovered by the inspection are indicated. Violations may also be discovered upon examination of results of laboratory analyses and review of Department records. Notification will be coming, confirming any violations indicated herein and listing any additional violations.

Interviewed (signature) _____

Date _____

Director (signature) _____

Date 2/18/87